AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. CANCELLED

2. (CURRENTLY AMENDED) The method of claim ~~1~~ 29, wherein said disrupting the cellular structure of some of the plurality of yeast cells releases intracellular peptides from the yeast cells into the aerobic fermentation supernatant.

3. (CURRENTLY AMENDED) The method of claim ~~1~~ 29, further comprising substantially separating the plurality of yeast cells from the aerobic fermentation supernatant.

4. (ORIGINAL) The method of claim 3, wherein said separating step takes place prior to said combining step.

5. CANCELLED

6. (CURRENTLY AMENDED) The method of claim ~~1~~ 29, wherein the plurality of yeast cells comprises saccharomyces cerevisiae.

7. (CURRENTLY AMENDED) The method of claim ~~1~~ 29, wherein the plurality of yeast cells comprise one or more of saccharomyces cerevisiae, kluyveromyces marxianus, kluyveromyces lactis, candida utilis, zygosaccharomyces, pichia, or hansanula.

8. (CURRENTLY AMENDED) The method of claim ~~1~~ 29, wherein the nutrient source comprises a sugar.

9. (PREVIOUSLY PRESENTED) The method of claim 8, wherein the nutrient source further comprises one or more of diastatic malt, diammonium phosphate, magnesium sulfate, ammonium sulfate zinc sulfate, and ammonia.

10. (CURRENTLY AMENDED) The method of claim ~~1~~ 29, wherein said disrupting the cellular structure of some of the plurality of yeast cells comprises physically disrupting the cellular structure of some of the plurality of yeast cells.

11. (PREVIOUSLY PRESENTED) The method of claim 10, wherein said physically disrupting comprises subjecting the yeast cells to one or more of a French Press, a ball mill, or a high-pressure homogenizer.

12. (CURRENTLY AMENDED) The method of claim ~~1~~ 29, wherein said disrupting the cellular structure of some of the plurality of yeast cells comprises chemically disrupting the cellular structure of some of the plurality of yeast cells.

13. (ORIGINAL) The method of claim 12, wherein said chemically disrupting comprises combining said plurality of yeast cells with a surface-active agent.

14. (ORIGINAL) The method of claim 12, wherein said chemically disrupting comprises adding about 2.5% to about 10% of a surfactant to a yeast cell suspension and agitating the mixture at a temperature of about 25° C to about 35° C.

15. (ORIGINAL) The method of claim 12, further comprising physically disrupting a plurality of said yeast cells.

16. (PREVIOUSLY PRESENTED) The method of claim 29, wherein said surface-active agent comprises a nonionic surfactant.

17. (PREVIOUSLY PRESENTED) The method of claim 29, wherein said surface-active agent comprises a combination of nonionic and anionic surfactants.

18. (PREVIOUSLY PRESENTED) The method of claim 29, wherein said surface-active agents comprise ethoxylated linear alcohol or alkyl ether sulfate.

19. CANCELLED

20. (CURRENTLY AMENDED) The method of claim ~~19~~ 29, wherein said heating step comprises increasing the temperature of said plurality of yeast cells to between about 40° to about 60° C for about 2 to about 24 hours, followed by cooling to less than 25° C.

21. (ORIGINAL) The method of claim 20, wherein said heating step takes place prior to said disrupting step.

22-28. CANCELED

29. (CURRENTLY AMENDED) A method for accelerating nutrient uptake in bacteria or yeast without a substantially commensurate increase of biomass, comprising contacting said bacteria or yeast with a mixture of an aerobic yeast fermentation supernatant and a surface-active agent, whereby the nutrient uptake in said bacteria or yeast is increased without a substantially commensurate increase of biomass,

wherein the mixture of the aerobic yeast fermentation supernatant and the surface-active agent is obtained by:

fermenting under aerobic conditions a plurality of yeast cells in the presence of a nutrient source,

heating the plurality of yeast cells after the fermenting step,

disrupting the cellular structure of some of the plurality of yeast cells to obtain a fermentation product,

centrifuging the fermentation product to obtain the aerobic fermentation supernatant containing peptides, and

combining the aerobic fermentation supernatant with the surface-active agent.

30. (PREVIOUSLY PRESENTED) The method of claim 29, wherein said bacteria or yeast are mixed in with wastewater.

31. (PREVIOUSLY PRESENTED) The method of claim 29, wherein said bacteria or yeast are used in a sewage collection system.

32. (PREVIOUSLY PRESENTED) The method of claim 31, wherein said sewage collection system comprises a cross-flow membrane filtration system.

33. (PREVIOUSLY PRESENTED) The method of claim 31, wherein said sewage collection system comprises a cooling tower.

34-39. CANCELED

40. (PREVIOUSLY PRESENTED) The method of claim 29, wherein the mixture of the aerobic fermentation supernatant and the surface-active agent is obtained by:

admixing a plurality of yeast cells with an alcohol at a temperature of at least 40° C to obtain a peptide product,

removing the alcohol to obtain the aerobic fermentation supernatant containing peptides, and

combining the aerobic fermentation supernatant with a surface-active agent.

41. (PREVIOUSLY PRESENTED) The method of claim 40, further comprising separating the plurality of yeast cells from the aerobic fermentation supernatant.

42. (PREVIOUSLY PRESENTED) The method of claim 41, wherein said plurality of yeast cells are separated from said aerobic fermentation supernatant by filtration.

43. (PREVIOUSLY PRESENTED) The method of claim 42, further comprising treating the aerobic fermentation supernatant with charcoal after it is separated from the plurality of yeast cells.

44. (ORIGINAL) The method of claim 40, wherein said alcohol is methanol-denatured alcohol.

45. (PREVIOUSLY PRESENTED) The method of claim 40, wherein said admixing step comprises admixing a plurality of yeast cells with an alcohol at a temperature of at least 60° C under agitation for at least about 2 hours.

46. (PREVIOUSLY PRESENTED) The method of claim 40, further comprising adding water to said aerobic fermentation supernatant.

47. ((PREVIOUSLY PRESENTED) The method of claim 40, further comprising refining the aerobic fermentation supernatant and retaining those peptides having a molecular weight of less than about 30,000 daltons.

48. (WITHDRAWN) The method of claim 40, further comprising refining the aerobic fermentation supernatant and retaining those peptides having a molecular weight of less than about 24,000 daltons.

49. (WITHDRAWN) The method of claim 40, further comprising refining the aerobic fermentation supernatant and retaining those peptides having a molecular weight of less than about 17,000 daltons.

50. (WITHDRAWN) The method of claim 40, further comprising refining the aerobic fermentation supernatant and retaining those peptides having a molecular weight of between about 6,000 daltons and about 17,000 daltons.

51. (WITHDRAWN) The method of claim 47, wherein said refining is performed using anion exchange chromatography.

52. (PREVIOUSLY PRESENTED) The method of claim 47, further comprising refining performed by molecular sieve chromatography.

53-58. CANCELED

59. (CURRENTLY AMENDED) A method for accelerating nutrient uptake in bacteria or yeast without a substantially commensurate increase in biofilm production, comprising contacting said bacteria or yeast with a mixture of a aerobic yeast fermentation supernatant and a surface-active agent, whereby the nutrient uptake in said bacteria or yeast is increased without a substantially commensurate increase in biofilm production,

wherein the mixture of the aerobic yeast fermentation supernatant and the surface-active agent is obtained by:

fermenting under aerobic conditions a plurality of yeast cells in the presence of a nutrient source,

heating the plurality of yeast cells after the fermenting step,

disrupting the cellular structure of some of the plurality of yeast cells to obtain a fermentation product,

centrifuging the fermentation product to obtain the aerobic fermentation supernatant containing peptides, and

combining the aerobic fermentation supernatant with the surface-active agent.

60-61. CANCELLED

62. (CURRENTLY AMENDED) The method of claim ~~61~~ 59, wherein said heating step comprises increasing the temperature of said plurality of yeast cells to between about 40° to about 60° C for about 2 to about 24 hours, followed by cooling to less than 25° C.